

	Application No.	Applicant(s)
•	10/517,128	CLARK, JOHN
Notice of Allowability	Examiner	Art Unit
	Eric A. Gates	3722
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT F of the Office or upon petition by the applicant. See 37 CFR 1.31	pears on the cover sheet will (OR REMAINS) CLOSED in (I) or other appropriate community of the coverage	th the correspondence address n this application. If not included unication will be mailed in due course. THIS subject to withdrawal from issue at the initiative
1. A This communication is responsive to Applicant's prelimina	ary amendment filed 6 Decen	<u>nber 2004</u> .
2. X The allowed claim(s) is/are <u>1-3,5-17,19-67 and 69-84</u> .	·	
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority of a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> <li>2.  Certified copies of the priority documents have</li> <li>3.  Copies of the certified copies of the priority documents have</li> </ul>	re been received. re been received in Applicatio	on No
International Bureau (PCT Rule 17.2(a)).	ocuments have been received	u iii iiis national stage application nom the
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE noted below. Failure to timely comply will result in ABANDON! THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requirements
4. A SUBSTITUTE OATH OR DECLARATION must be subr INFORMAL PATENT APPLICATION (PTO-152) which give		
5. CORRECTED DRAWINGS ( as "replacement sheets") mu	ist be submitted.	
(a) ☐ including changes required by the Notice of Draftsper	rson's Patent Drawing Review	v ( PTO-948) attached
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date	<del>-</del>	
(b) including changes required by the attached Examiner Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in	1.84(c)) should be written on to the header according to 37 CF	he drawings in the front (not the back) of R 1.121(d).
<ol> <li>DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT</li> </ol>		
<ul> <li>Attachment(s)</li> <li>1. ☑ Notice of References Cited (PTO-892)</li> <li>2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>3. ☑ Information Disclosure Statements (PTO/SB/08),</li></ul>	6. ☐ Interview S Paper No. 7. ⊠ Examiner's	formal Patent Application ummary (PTO-413), /Mail Date Amendment/Comment Statement of Reasons for Allowance
		MONICA CARTER SUPERVISORY PATENT EXAMINER

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## **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. During a telephone conversation conducted on 20 December 2007, Mr. Richard Wesorick authorized the Director to charge Deposit Account No. 20-0090 the required fee of \$105.00 for an additional independent claim and authorized the following examiner's amendment. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claim 1. (Currently Amended) A drill attachment for coupling a tubular cutting member having a bore to drive means for rotating the cutting member, the drill attachment comprising: a housing defining first and second fluid conduits; and a drive shaft rotatably mounted within the housing and having fluid transmitting first and second end portions in fluid communication with the respective first and second fluid conduits, the first end portion being adapted for coupling to one of a tubular cutting member and a drive means and the second end portion being adapted for coupling to the other of the tubular cutting member and the drive means; and wherein one of said first and second end portions of the drive shaft is adapted for coupling to a tubular cutting member when dry drilling is required, and the other of said first and second end portions is adapted for coupling to a tubular cutting member when wet drilling is required.

Claim 4. (Cancelled)

Claim 14. (Currently Amended) A drill attachment as claimed in claim 13, wherein said at least one radial bore merges with the first axial bore in the region of the <u>a</u> terminating end of said first axial bore.

Claim 16. (Currently Amended) A drill attachment as claimed in claim 12, A drill attachment for coupling a tubular cutting member having a bore to drive means for rotating the cutting member, the drill attachment comprising: a housing defining first and second fluid conduits; and a drive shaft rotatably mounted within the housing and having fluid transmitting first and second end portions in fluid communication with the respective first and second fluid conduits, the first end portion being adapted for coupling to one of a tubular cutting member and a drive means and the second end portion being adapted for coupling to the other of the tubular cutting member and the drive means; wherein the drive shaft comprises a first axial bore which extends partially through the drive shaft from the first fluid transmitting end portion thereof, and terminates at a point within the drive shaft; and wherein the drive shaft from the second fluid transmitting end portion thereof, and terminates at a point within the drive shaft.

Claim 18. (Cancelled)

Claim 20. (Currently Amended) A drill attachment as claimed in claim <u>17</u> <del>13</del>, wherein the location of said radial bores along the length of the drive shaft is such that said bores are substantially aligned with a <u>said</u> respective first and second fluid <u>conduits</u> conduit in the housing.

Claim 48. (Currently Amended) A drill attachment as claimed in claim 47, A drill attachment for coupling a tubular cutting member having a bore to drive means for rotating the cutting member, the drill attachment comprising: a housing defining first and second fluid conduits; and a drive shaft rotatably mounted within the housing and having fluid transmitting first and second end portions in fluid communication with the respective first and second fluid conduits, the first end portion being adapted for coupling to one of a tubular cutting member and a drive means and the second end portion being adapted for coupling to the other of the tubular cutting member and the drive means; wherein where dust extraction is effected through extraction apertures, the dust is drawn into a chamber in the housing and through one of the first and second fluid conduits; wherein the chamber is located at a first side of the drill attachment and is in fluid communication with the first fluid conduit in the housing; and wherein the side of the drilling attachment comprising the chamber is also adapted for use in wet drilling, wherein means are provided for closing the opening through which dust is extracted into the chamber during dry drilling.

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Claim 53. (Currently Amended) A drill attachment as claimed in claim 52, A drill attachment for coupling a tubular cutting member having a bore to drive means for rotating the cutting member, the drill attachment comprising: a housing defining first and second fluid conduits; and a drive shaft rotatably mounted within the housing and having fluid transmitting first and second end portions in fluid communication with the respective first and second fluid conduits, the first end portion being adapted for coupling to one of a tubular cutting member and a drive means and the second end portion being adapted for coupling to the other of the tubular cutting member and the drive means; wherein where dust extraction is effected through extraction apertures, the dust is drawn into a chamber in the housing and through one of the first and second fluid conduits; wherein the chamber is in selective fluid communication with one of the first and second fluid conduits in the housing, such that a fluid path between the chamber and said fluid conduit is open when dust is extracted through extraction apertures; and wherein selective fluid communication between the chamber and the fluid conduit is achieved by use of a sliding collar provided on the housing.

Claim 59. (Currently Amended) A drill attachment as claimed in claim <u>55</u> <del>56</del>, wherein when the collar is moved to close the fluid path between the fluid conduit and the chamber, that is, towards a first position, a first end of the collar will abut a side face of the ring, therefore closing a portion of the fluid conduit and consequently said fluid path.

Claim 68. (Cancelled)

Claim 80. (Currently Amended) A drill attachment as claimed in claim 1, wherein the

drive means is a drill drilling.

Claims 85-92. (Cancelled)

Allowable Subject Matter

2. Claims 1-3, 5-17, 19-67, and 69-84 are allowed. Claims 1, 16, 48, and 53 are

the independent claims.

3. The following is an examiner's statement of reasons for allowance:

The closest prior art of record is U.S. Patent 4,036,308 to Dellenberg.

Dellenberg discloses a drill attachment 211/235 for coupling a tubular cutting member

214 having a bore 215 to drive means 11 for rotating the cutting member, the drill

attachment comprising: a housing 211 defining first 222 and second 223 fluid conduits;

and a drive shaft 235 rotatably mounted within the housing and having fluid transmitting

first 217 and second 218 end portions in fluid communication with the respective first

and second fluid conduits, the first end portion being adapted for coupling to one of a

tubular cutting member and a drive means and the second end portion being adapted

for coupling to the other of the tubular cutting member and the drive means.

The patent to Dellenberg does not disclose "wherein one of said first and second

end portions of the drive shaft is adapted for coupling to a tubular cutting member when

dry drilling is required, and the other of said first and second end portions is adapted for

coupling to a tubular cutting member when wet drilling is required" as claimed in independent claim 1, or "wherein the drive shaft comprises a second axial bore which extends partially through the drive shaft from the second fluid transmitting end portion thereof, and terminates at a point within the drive shaft" as claimed in independent claim 16, or "wherein the side of the drilling attachment comprising the chamber is also adapted for use in wet drilling, wherein means are provided for closing the opening through which dust is extracted into the chamber during dry drilling" as claimed in independent claim 48, or "wherein selective fluid communication between the chamber and the fluid conduit is achieved by use of a sliding collar provided on the housing" as claimed in independent claim 53, and as such does not anticipate the instant invention as disclosed in independent claims 1, 16, 48, and 53.

Furthermore, there is no combinable teaching in the prior art of record that would reasonably motivate one having ordinary skill in the art to so modify the teachings of Dellenberg, and thus, for at least the foregoing reasoning, the prior art of record does not render obvious the present invention as set forth in independent claims 1, 16, 48, and 53.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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## Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric A. Gates whose telephone number is (571) 272-5498. The examiner can normally be reached on Mon-Thurs 8:45 - 6:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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EAG 20 December 2007 MONICA CARTER
SUPERVISORY PATENT EXAMINED